

rays of a darker colour and covered with a smooth periostracum; teeth small, the cardinal tooth on right valve bifid; posterior side obtusely rounded above, angled below; anterior side sharply rounded; dorsal margins very gradually sloping; ventral margin angled, somewhat produced centrally.

Long. 13, lat. 20.5 mm.

Hab. Podor, Senegal River.

Allied to *F. levigata*, von Mts., but differing from that species by its angular and produced ventral margin, more sharply rounded anterior side, and more obtuse posterior side; moreover, the bifid cardinal tooth in the right valve immediately distinguishes it from *F. levigata*.

EXPLANATION OF PLATE VII.

Fig. 1. Gibbus (Edentulina) confusa, sp. n.

Figs. 2, 3. Helicarion bitzeensis, sp. n.

Figs. 4, 5. — umbrosolabiata, sp. n.

Fig. 6. Thapsia rosenbergi, sp. n.

Fig. 7. Achatina dacostana, sp. n.

Fig. 8. — subcylindrica, sp. n.

Fig. 9. Callistoptepa tiara, sp. n.

Fig. 10. Pseudachatina nodosa, sp. n.

Fig. 11. — nodosa, var. *eminens*, nov.

Fig. 12. Pseudotrochus batesi, sp. n.

Fig. 13. — efulenensis, sp. n.

Fig. 14. Pseudoglessula camerunensis, sp. n.

Fig. 15. Homorus foveolatus, sp. n.

Fig. 16. Subulina jaensis, sp. n.

Fig. 17. Fischeria messengeri, sp. n.

Fig. 18. — approximans, sp. n.

XXII.—*Rhynchotal Notes*.—XLVI. By W. L. DISTANT.

HOMOPTERA.

Fam. Cercopidæ.

Neotropical Genera and Species.

The Neotropical Cercopidæ are well represented in the British Museum. In addition to those described by Walker it possesses the splendid Godman Collection from Central America worked out and described by Fowler. It has also during recent years acquired a large number of species from Ecuador and Bolivia, many of which are here described. The Fry Collection, bequeathed to the British Museum by

the late Alexander Fry, also contained many South Brazilian species.

Dr. Jacobi has recently published the description of "Neue Cercopiden des Andengebietes," which comprise 41 new species and some new genera, and I have again to thank that able homopterist for letting me see cotypes of all but five of these species.

Subfam. *APHROPHORINÆ*.

Genus *AVERNUS*.

Avernus, Stål, Hem. Afr. iv. p. 68 (1866); id. Berl. ent. Zeitschr. x. p. 384 (1866).

Type, *A. ocelliger*, Walk.

Avernus ocelliger.

Ptyelus ocelliger, Walk. List Hom. iii. p. 703 (1851).

Ptyelus interruptus, Walk. loc. cit. p. 715.

Avernus alboatra, Stål (part.), Berl. ent. Zeitschr. x. p. 384 (1866).

Hab. Colombia, Venezuela, Bolivia.

Stål had treated the *Monecphora alboatra*, Walk., as a synonym of the above. This is one of the few indubitable errors made by that great Rhynchotist, as *alboatra* differs in the shape of the head and the position of the ocelli from the generic characters given by himself for *Avernus*, which he founded for their reception. *M. alboatra* cannot therefore remain the type of the genus, which was described subsequent to his visit to the British Museum.

A. meridionalis, Jac., is an allied species (*var.*?).

Avernus balleatus, sp. n.

Ptyelus eleninus, Bredd. MS.

Black; tegmina crossed near middle by a white fascia which narrows towards costal margin; vertex much shorter than breadth between eyes, obtusely angularly rounded in front, on central anterior area reaching apex is a slightly depressed space with raised margins, which is convex in front, truncate behind; pronotum centrally longitudinally carinate, its anterior margin somewhat strongly angularly rounded; scutellum discally angularly flattened, at base only centrally moderately foveate, both these areas centrally longitudinally incised; face without a central ridge; rostrum reaching the intermediate coxæ; posterior tibiæ with two strong spines; tegmina about two and a half times as long as broad.

Long., incl. tegm., 14 to 15 mm.

Hab. Ecuador; Balzapamba (Brit. Mus.).

The British Museum possesses two specimens of this species, purchased as one of "Breddin's co-types" some years ago, but I can find no trace of a corresponding description.

Avernus affinis, sp. n.

Allied to *A. balteatus*, Dist., but the colour pale castaneous, not black, and the legs brownish ochraceous; the tegmina in addition to the white transverse fascia possesses three white spots on the apical third—the first, largest and rounded on costal margin, the other two more ovate and placed on disk in longitudinal series before apex; head and pronotum a little narrower than in *A. balteatus*, the latter also finely granulose.

Long., incl. tegm., 14 mm.

Hab. Brazil (Fry. Coll., Brit. Mus.).

NEOAVERNUS, gen. nov.

Vertex about as long as breadth between eyes, somewhat broadly rounded in front; ocelli at base, close to eyes, very much nearer to eyes than to each other, the lateral and apical margins a little upwardly ridged; face without a central carination; clypeus foveately depressed on each side at base; rostrum slightly passing the intermediate coxæ; pronotum with a central longitudinal carination which is more prominent and distinct on disk, the anterior lateral margins oblique, shorter than the posterior lateral margins, which are slightly sinuate; anterior margin roundly truncate, posterior margin strongly subangularly concave in front of scutellum, which is longer than broad; posterior tibiæ with two strong spines; tegmina twice as long as broad.

Type, *N. alboater*, Walk.

Differs from *Avernus* by the larger and more rounded vertex, different position of the ocelli, and short tegmina.

Neoavernus alboater.

Monecphora alboatra, Walk. List Hom. iii. p. 682 (1851).

Avernus alboater, Stål (part.), Berl. ent. Zeitschr. x. p. 384 (1866).

Hab. Colombia (Brit. Mus.).

GENUS SPHODROSCARTA.

Sphodroscarta, Stål, Hem. Fabr. ii. p. 17 (1869).

Type, *S. gigas*, Fabr.

Sphodroscarta bimaculata, sp. n.

Black; eyes and abdominal segmental margins ochraceous; tegmina with two large white spots on inner margin, one crossing clavus a little before its apex, the other and smaller at the lower part of apical margin; wings dark fuliginous; vertex a little more than half as long as breadth between eyes, somewhat angularly produced, the lateral margins oblique, the basal margin obtusely angularly sinuate, two short carinate lines not reaching base, each situate outside the region of the ocelli; pronotum not carinate, but centrally longitudinally depressed, the anterior lateral margins very short, the posterior lateral margin about as long as the posterior margin, which is strongly angularly concave; scutellum much longer than broad, its disk centrally longitudinally depressed; posterior tibiæ with two strong spines.

Long., excl. tegm., ♀ 12 mm.; exp. tegm. 30 mm.

Hab. Bolivia; Yungas de la Paz.

Subfam. *CERCOPINÆ*.Genus *HYBOSCARTA*.

Hyboscarta, Jacobi, SB. Ges. naturf. Fr. Berlin, 1908, no. 8, p. 208.

Type, *H. rubrica*, Jacobi.

Hyboscarta insignis.

Monephora insignis, Walk. List Hom., Suppl. p. 178 (1858).

Hab. Amazons.

Hyboscarta semivitrea.

Sphenorhina semivitrea, Walk. List Hom., Suppl. p. 184 (1858).

Hab. Amazons.

Hyboscarta tricolor, sp. n.

Head, pronotum, scutellum, body beneath, anterior and intermediate femora (posterior legs mutilated in specimen described), and less than basal half of tegmina, sanguineous; two central spots to mesosternum, anterior and intermediate tibiæ and tarsi, black; a little more than apical half of tegmina ochraceous, subhyaline, the lateral and subapical margins of this area broadly black, extending to apex of clavus; pronotum and tegmina thickly finely punctate;

face moderately compressed, laterally strongly transversely striate, centrally longitudinally ridged.

Long. $8\frac{1}{2}$ mm.

Hab. Brazil; Lages.

Genus ISCHNORHINA.

Ischnorhina, Stål, Hem. Fabr. ii. p. 14 (1869).

Subgen. *Schistogonia*, Stål, *loc. cit.*

Types, *I. sanguinea*, Fabr., and *I. ephippium*, Fabr.

Ischnorhina valida, sp. n.

Head above and beneath (including face), pronotum, scutellum, and sternum sanguineous; abdomen above and beneath and the legs black; base of abdomen narrowly sanguineous; tegmina sanguineous, with a broad black fascia commencing at about one-fourth from base and extending and occupying rather more than the costal area, the apical area, and continued along the inner margin to about one-fourth from base, the sanguineous coloration thus being confined to the basal area and a medial longitudinal fascia not extending beyond apical area, the extreme costal margin for about one-fourth from base dull obscure ochraceous; wings pale shining fuliginous with the veins piceous; vertex with the central lobe narrowed and anteriorly produced; face sharply compressed, as in typical forms of *Sphenorhina*, and prominently transversely striate on each side; pronotum prominently foveately depressed on each side of anterior area, the anterior lateral margins moderately ampliate and reflexed; scutellum quadrangularly ridged, apex also ridged.

Long., excl. tegm., $9\frac{1}{2}$ mm.; exp. tegm. 30 mm.

Hab. Cayenne (Brit. Mus.).

Allied to *I. invalida*, Jacobi (a species I have not seen), from which it differs by the colour of the sternum and structural characters detailed above, which are not given by its describer in his diagnosis.

Ischnorhina juno, sp. n.

Vertex, pronotum, scutellum, face, lateral areas of prosternum, and base of abdomen sanguineous; disk of scutellum, abdomen, body beneath, and legs black; tegmina black, base of costal area and base of posterior claval area (both these markings united at base) sanguineous; wings fuliginous, the veins piceous, extreme base sanguineous; vertex about as long as breadth between eyes, the apex angularly projecting, a longitudinal impressed line in front

of each ocellus; pronotum foveately impressed on each side of anterior area, the lateral margins moderately sharply reflexed; face strongly compressed, posteriorly pointed, thence obliquely straight to clypeus, centrally longitudinally ridged; posterior tibiæ with a strong spine a little before apex; tegmina three times as long as broad.

Long., excl. tegm., 9 mm.; exp. tegm. 30 mm.

Hab. Peru (Coll. Dist.).

Ischnorhina grandis.

Sphenorhina grandis, Dist. Tr. Ent. Soc. Lond. 1878, p. 179; Waterh.

Aid Identif. Ins. ii. pl. 148. fig. 5 (1884).

Tomaspis laqueus, Bredd. Soc. entomol. xix. p. 58 (1904).

Sphenorhina laqueus, Bredd. Cotype purchased by Brit. Mus.

Hab. Colombia; Ecuador.

Ischnorhina bogotana.

Sphenorhina bogotana, Dist. Trans. Ent. Soc. Lond. 1878, p. 179;

Waterh. Aid Identif. Ins. ii. pl. 152. fig. 2 (1884).

Hab. Bogota.

Ischnorhina flammans.

Sphenorhina flammans, Walk. List Hom., Suppl. p. 179 (1858).

Sphenorhina acuta, Stål, Rio Jan. Hem. ii. p. 14 (1858); id. Öfv.

Vet.-Ak. Förh. 1862, p. 493.

Hab. Brazil.

Ischnorhina rufivaria.

Sphenorhina rufivaria, Walk. List Hom. iii. p. 686 (1851).

Hab. Brazil.

Ischnorhina xanthomela.

Sphenorhina xanthomela, Walk. List Hom., Suppl. p. 180 (1858).

Hab. Amazons.

GENUS TOMASPIS.

Tomaspis, Amy. & Serv. Hist. Hémo. p. 560 (1843). Type, *T. furcata*, Germ.

Monecphora, Amy. & Serv. loc. cit. p. 562. Type, *M. cingulata*, Le P. & Serv.

Sphenorhina, Amy. & Serv. loc. cit. Type, *S. lineolatus*, Amy. & Serv.

I have previously regarded the above divisions of Amyot and Serville as generically distinct and have acted accordingly, for if we compare the types (as above) there is every reason to do so. Not only is there then found a distinct structural

difference in the face, but in the type of *Tomaspis* there is a fundamental difference in the length and structure of the tegmina. But when a large series of the species that should be arranged under these three proposed genera is examined, the differences in too many cases become evanescent and relative. Stål, who originally used them as distinct genera (Rio Jan. Hem. 1858), subsequently (Hem. Africana, 1866) treated them, with the addition of *Triecphora*, Amy. & Serv., as synonyms of *Tomaspis*, and in this generic conclusion he has been followed by Fowler and Jacobi. From this decision I only differ by not including *Triecphora*, a Palæartic and Ethiopian genus also treated as distinct by Puton, Melichar, and other writers. From Berg (Hem. Argent., 1879) I dissent by including *Sphenorhina*, and agree with him in excluding *Triecphora*.

It is not, however, to be regarded as improbable that this large and miscellaneous genus, *Tomaspis*, as thus understood will yet be consistently divided. The differential characters given by Amyot and Serville for their three proposed genera are largely and principally confined to facial structure, and these have proved a hindrance rather than a help, by monopolising the attentions of homopterists to the neglect of other characters, many of which undoubtedly exist and will probably be used by some future analytical student.

Tomaspis parana, sp. n.

Head and pronotum sanguineous; basal half of head, two spots on anterior area of pronotum—connected with the anterior margin,—scutellum, abdomen above, and body beneath black; legs black or piceous; face, apex of scutellum, and lateral margins of prosternum sanguineous; tegmina sanguineous, a costal streak extending from base to apex (near base and beyond middle not reaching the costal margin), apical margin, a central longitudinal fascia, commencing near middle and extending to apex, and a claval streak black; wings fuliginous; face sanguineous, strongly, centrally, longitudinally ridged, moderately compressed, not terminating in an obtuse point; rostrum reaching the intermediate coxæ; tegmina narrow, more than three times as long as broad.

Var. *a*.—Legs dull testaceous red, apices of the femora piceous.

Long., excl. tegm., ♂ 12, ♀ 17 mm.; exp. tegm. ♂ 39, ♀ 44 mm.

Hab. Brazil; Parana (*E. Dukinfield Jones*, Brit. Mus.).

Tomaspis consanguinea, sp. n.

Allied to *T. parana*, Dist., but the tegmina comparatively shorter and broader, not quite three times longer than broad; head and pronotum sanguineous, without black markings; scutellum and legs wholly sanguineous; tegmina similarly fasciated as in *T. parana*.

Long., excl. tegm., ♀ 16 mm.; exp. tegm. 45 mm.

Hab. Rio Grande do Sul (Brit. Mus.).

Tomaspis chapada, sp. n.

Sanguineous; lateral lobes and base of head, two large spots on anterior area of the pronotum and connected with the anterior margin, scutellum, abdomen above, body beneath, and legs black; face and lateral margins of prosternum sanguineous; tegmina sanguineous, costal and apical margins (the former broad and occupying the costal area for about two-thirds its length and the latter continued to apex of clavus), a broad central somewhat short longitudinal streak between middle and apical area, and a streak at middle of upper claval margin black; wings fuliginous; tegmina barely three times as long as broad; face moderately compressed, strongly centrally ridged, terminating in an obsolete point outwardly and then subtruncately directed to clypeus; rostrum reaching the intermediate coxæ.

Var.—Tegmina narrowly margined with black as in typical form, but not broadened at costal area, the interior black streaks practically obsolete.

Long., excl. tegm., 12 mm.; exp. tegm. 30–35 mm.

Hab. Central Brazil; Chapada (*A. Robert*, Brit. Mus.).

Tomaspis brasiliensis, sp. n.

Body and legs black; apex of head, lateral margins and a central longitudinal fascia to pronotum, and extreme base of abdomen above sanguineous; tegmina sanguineous, costal and apical margins (the first much broadened at costal area and thus continued for about three-fourths from base, the latter continued to apex of clavus) and a broad median longitudinal fascia which occupies nearly upper half of clavus, is continued to near apex, and is fractured near claval margin, black; wings fuliginous; face black, in structure resembling that of the previously described species *T. chapada*; rostrum almost reaching the posterior coxæ; tegmina not more than three times as long as broad.

Long., excl. tegm., 13 mm.; exp. tegm. 40 mm.

Hab. Brazil (Fry Coll., Brit. Mus.).

Tomaspis spectabilis, sp. n.

Head, pronotum, and scutellum dull reddish castaneous; abdomen above, face, sternum, and legs sanguineous; abdomen beneath, spots and suffusions to sternum, longitudinal stripes to intermediate femora, posterior femora (excluding apices), tarsi (excluding extreme base), and apical joint of rostrum black; abdomen beneath with the posterior segmental margins (narrowly) and the lateral margins (somewhat broadly) sanguineous; tegmina ochraceous, narrow costal margin extending round apex to apex of clavus, centre of posterior claval margin, claval apex, and an irregular central longitudinal fascia, irregularly widened at about one-third from base and continued to near apex, black; claval suture piceous; wings dark fuliginous, their extreme bases sanguineous; vertex subangulate in front and distinctly longitudinally carinate; face moderately compressed, strongly centrally carinate and transversely striate (of the *Monephora* form); pronotum very finely and thickly wrinkled, obscurely finely, centrally, longitudinally carinate, the carination not reaching the anterior margin, the anterior lateral margins slightly reflexed; rostrum reaching the intermediate coxæ.

Long., excl. tegm., 10 mm.; exp. tegm. 29 mm.

Hab. Bolivia (*J. Steinbach*, Brit. Mus.).

Tomaspis fryi, sp. n.

Vertex piceous, with a slightly arched transverse ochraceous fascia between the eyes; pronotum with the basal two-thirds piceous-brown, margined anteriorly with a transverse black line, in front of which the anterior area is ochraceous, as is also a lateral spot on each side behind the black line; scutellum piceous, with a pale ochraceous spot at commencement of apical area; abdomen above piceous, sanguineous at base, the connexivum ochraceous with black spots; face orange-yellow with a black basal line; body beneath and legs pale ochraceous; sternal and coxal spots, apices of femora, anterior tibiæ, bases and apices of intermediate and posterior tibiæ, the tarsi, narrow segmental margins and a longitudinal line at inner margins of connexivum, piceous or black; tegmina black; basal half of clavus, a basal linear costal spot, a longitudinal streak to corium, commencing at base above clavus and gradually narrowing to a subapical and subcostal quadrate spot, pale ochraceous; wings fuliginous; face broad and flatly rounded, of the *Monephora* form; vertex about as long as breadth between eyes, subconically rounded in front; scutellum broadly discally

foveate (imperfectly seen in the badly pinned type); tegmina about three times as long as broad.

Long., excl. tegm., $8\frac{1}{2}$ mm.; exp. tegm. 24 mm.

Hab. Brazil (Fry Coll., Brit. Mus.).

Tomaspis jonesi, sp. n.

uniformis, Sign. MS.

Head, pronotum, and scutellum pale ochraceous; abdomen above, body beneath, and legs sanguineous; a spot near apex of scutellum, anterior and intermediate tarsi and apices of posterior tarsi, eyes, and apex of rostrum black; lateral margins of prosternum ochraceous; tegmina pale ochraceous, with a broad transverse fascia near middle and about the apical fourth black; wings pale smoky hyaline; vertex about as long as breadth between eyes; face broad, rounded, not angulate (of the *Monephora* type), centrally longitudinally ridged; rostrum reaching the intermediate coxæ; pronotum very finely transversely wrinkled; scutellum discally foveately depressed; posterior tibiæ with two spines, one near base, the other a little beyond middle.

Long., excl. tegm., 8 mm.; exp. tegm. 24 mm.

Hab. Brazil; Parana (*E. Dukinfield Jones*, Brit. Mus.); Rio Negro (Coll. Dist.).

Many years ago I received a specimen labelled *uniformis*, MS., from my lamented friend Dr. Signoret, and probably there is a similarly identified specimen in the Vienna Museum, in which Dr. Signoret's collection is located.

Tomaspis saccharina, sp. n.

Tomaspis pictipennis, Uhler (*nec Stål*), Proc. Zool. Soc. Lond. 1895, p. 58.

Head, pronotum, and scutellum dark bronzy; abdomen above and beneath sanguineous; face, sternum, legs, and a sublateral fascia on each side of abdomen beneath bluish black; tegmina piceous brown, with two transverse whitish fasciæ, the first broadest and slightly oblique before middle, the second narrower and nearly straight beyond middle; wings hyaline with the veins fuscous; vertex broader than long, rounded in front, centrally carinate and longitudinally depressed on each side before the eyes; face compressed, centrally longitudinally carinate, somewhat regularly rounded to clypeus (*Monephora* type); tegmina less than three times longer than broad.

Var. *a*.—A broad whitish streak in claval suture, united with the first transverse whitish fascia.

Var. *b.*—Basal third of tegmina almost totally whitish, only divided by the claval suture, which is piceous brown.

Hab. Trinidad (Brit. Mus.); Antilles; St. Vincent and Grenada (*Smith*, Brit. Mus.).

Reported from Trinidad as a destructive pest to the cultivation of sugar-cane.

As pointed out by Fowler, the *T. pictipennis*, Stål, is a synonym of the *M. postica*, Walk. Apart from the considerable differences in colour and pattern, *T. postica* has a less developed and more evenly rounded face than *T. saccharina*.

Tomaspis dominicana, sp. n.

Head, pronotum, scutellum, and abdomen above black, lateral margins and apex of scutellum and base of abdomen sanguineous; body beneath and legs black; coxal spots, sternal spots, and broad lateral margins to meso- and metasterna sanguineous; tegmina black, with five sanguineous spots, situate one near base of clavus, one above apical end of clavus, two on medial vein (one at about one-third from base, the other on apical area), and the fifth costal beyond middle; wings fuliginous; vertex almost as long as breadth between eyes, medially longitudinally carinate, between this carination and the eyes a foveate depression on each side; scutellum strongly discally foveately depressed, the margins of this foveation raised, united posteriorly and continued to apex; face rounded to clypeus (*Moncephora* type); posterior tibiæ with two strong spines, the shorter near base, the longer near middle.

Long., excl. tegm., 8 mm.; exp. tegm. 19 mm.

Hab. Dominica (Brit. Mus.).

Received from the Imp. Dept. Agric., West Indies.

Tomaspis jamaicensis, sp. n.

Head, pronotum, and scutellum black; apical area of vertex and about basal half of pronotum (not reaching the anterior lateral margins) bright ochraceous; abdomen above and beneath and legs sanguineous; head beneath and sternum black, the latter spotted and suffused with sanguineous; face bright ochraceous; tegmina pitchy black, with two large bright ochraceous spots, the first and largest extending through clavus and reaching the subcostal vein at about one-third from base, the second spot smaller, central, and subapical; wings pale fuliginous; face rounded to clypeus (*Moncephora* type); vertex scarcely as broad as breadth

between eyes, not carinate; tegmina about two and a half times as long as broad; posterior tibiæ with two strong spines, the first and shortest near base, the second and longer near middle.

Long., excl. tegm., 9 mm.; exp. tegm. 26 mm.

Hab. Jamaica (Brit. Mus.).

Tomaspis multicolor, sp. n.

Head, pronotum, and scutellum black, greyishly pilose; a spot on each lateral margin of vertex between apex and eyes and continued beneath between base of face and eyes, and lateral margins of pronotum ochraceous; basal margin of pronotum and lateral margins and apex of scutellum purplish red; body beneath black; lateral margins of prosternum, coxæ, legs, and apex of abdomen sanguineous; apices of tarsi black; tegmina stramineous; margins and apex of clavus, basal fourth of corium, a central transverse fascia broadest on costal margin and extending to apex of clavus, and apical fourth black; vertex much shorter than breadth between eyes, broadly rounded in front, distinctly centrally longitudinally carinate; face of the *Monephora* type, somewhat broad, flattened at sides, centrally longitudinally carinate and transversely striate, gradually convexly continued to clypeus; posterior tibiæ with two prominent spines, one near base, the longer nearer apex.

Long., incl. tegm., 11 mm.

Hab. Central Brazil; Chapada (*A. Robert*, Brit. Mus.).

This species may be placed near *M. scita*, Walk.

Tomaspis dissimilis, sp. n.

Vertex dull testaceous red, eyes greyish with their posterior margins black; pronotum stramineous, a dull testaceous-red patch behind middle of anterior margin, followed by and united with a transverse black spot; scutellum piceous, its lateral margins stramineous; body beneath and legs dull ochraceous; face, disk of prosternum, anterior and intermediate femora, and abdomen above dull testaceous red; apex of rostrum, extreme apices of femora, anterior tibiæ and tarsi, bases and apices of intermediate tibiæ, the intermediate tarsi and apices of posterior tarsi, black; tegmina dark luteous, a short basal streak on costal area and an oblique basal fascia occupying nearly half of clavus stramineous; wings subhyaline, the abdominal area piceous; vertex about as long as broad between eyes, the anterior margin broadly rounded, a longitudinal impression on each

side a little before the eyes; face somewhat broad, only moderately compressed, roundly and evenly continued to clypens (*Monecphora* type); rostrum reaching the intermediate coxæ; pronotum densely and very finely wrinkled, a distinct broad depression at the middle of the black spot; posterior tibiæ with a long spine near middle and a short spine near base.

Long., excl. tegm., 8 mm.; exp. tegm. 23 mm.

Hab. Colombia; R. Dagua (Brit. Mus.).

Tomaspis astralis, sp. n.

Head, pronotum, and scutellum bright shining olivaceous green, shortly palely pilose; abdomen above, body beneath, and legs testaceous red: head beneath, anterior and intermediate tibiæ, apices of posterior tibiæ, the tarsi, and anal segment black; tegmina black, two short basal testaceous-red streaks, one on posterior claval margin, the other above clavus, six ochraceous spots, situate one and smallest near middle of clavus, two in almost transverse series about one-third from base, and three at commencement of apical area (one on costal margin, one on inner margin, and the third on disk a little beyond the others); wings pale fuliginous; vertex about as long as breadth between eyes, somewhat angularly rounded anteriorly, strongly centrally longitudinally carinate, depressed on each lateral area, where there is a short longitudinal incised line; pronotum with a transverse cicatrice on anterior margin, from which proceeds a short central longitudinal carination not reaching middle; face a little angulate (intermediate between the *Monecphora* and *Sphenorhina* types); posterior tibiæ with two spines, a very short one near base, and a much longer one near apex.

Long., excl. tegm., 5 mm.; exp. tegm. 16 mm.

Hab. Bolivia; Yungas de la Paz (Brit. Mus.).

Tomaspis funebris, sp. n.

Vertex, pronotum, and scutellum black; lateral margins of vertex in front of eyes narrowly testaceous; abdomen above dull sanguineous, the central area and connexivum somewhat picceous; body beneath and legs black, basal margin of face testaceous; tegmina black; wings fuliginous, sanguineous at base; vertex about as long as breadth between eyes, somewhat angularly rounded in front; centrally longitudinally carinate, transversely impressed near middle and in front of this impression, the margins of the central area or lobe are also ridged; pronotum rugulosely

punctate, the anterior lateral margins distinctly reflexed; scutellum transversely striate, moderately foveately depressed on disk; face moderately compressed, slightly angulate near middle (between the *Monecphora* and *Sphenorhina* types), strongly centrally ridged, transversely coarsely striate on lateral areas; rostrum reaching the intermediate coxæ; posterior tibiæ with a strong spine beyond middle and a very short spine near base; tegmina about two and a third times as long as broad.

Long., excl. tegm., ♀ 15 mm.; exp. tegm. 38 mm.

Hab. Peru; Chandrainayo (Brit. Mus.).

Tomaspis noctua, sp. n.

Vertex, pronotum, and scutellum black; frontal margins of anterior lobe, ocelli, eyes, and anterior lateral margins of pronotum pale ochraceous; lateral margins and apex of scutellum and abdomen above reddish testaceous; body beneath and legs black; a spot on each side of base and the central ridge to face and the lateral margins of abdomen pale ochraceous; base of rostrum, apices of anterior femora beneath, obscure longitudinal streaks to femora beneath, apices of tarsi (excluding claws), and narrow posterior abdominal segmental margins reddish testaceous; tegmina black, basal third of costal margin (widened at its apex), discoidal vein for about one-third from base (where it branches, the two branches united at their ends), upper claval margin and claval vein for about two-thirds from their base, and a subcostal spot before apical area sanguineous; wings fuliginous, the veins black, the base sanguineous; face compressed, centrally ridged, scarcely pointed and moderately continuous to clypeus (intermediate between the *Monecphora* and *Sphenorhina* types); rostrum reaching the intermediate coxæ; vertex centrally ridged, somewhat angulate in front, longitudinally incised between the ocelli and eyes; pronotum rugulose and punctate, with an obscure central longitudinal carinate line which is only distinct on disk, the anterior lateral margins reflexed; scutellum longer than broad, transversely striate; tegmina about two and a half times as long as broad.

Long., excl. tegm., ♀ 14½ mm.; exp. tegm. 40 mm.

Hab. Amazons; Nauta (*Degand*, Brit. Mus.).

Tomaspis combusta, sp. n.

Vertex black, anterior half in front of eyes reddish yellow; ocelli bright yellow; pronotum black, the lateral margins

broadly reddish yellow; abdomen above and beneath reddish yellow; sternum and legs black; face, lateral margins of prosternum, anterior and intermediate femora (excluding base and apex), apices of posterior femora, and tarsal claws reddish yellow; tegmina black, basal third, costal margin (abruptly widening at about one-third from apex, continued round apex and terminating on posterior margin at apex of clavus) reddish yellow; wings pale fuliginous, extreme base black; vertex about as long as breadth between eyes, centrally longitudinally tricarinate in front of eyes, centrally carinate between the ocelli, and with an impressed line on each side of the ocelli; face strongly centrally longitudinally ridged, moderately angulated posteriorly (intermediate between the typical forms of *Monecphora* and *Sphenorhina*); rostrum reaching the intermediate tibiae; pronotum punctate and slightly rugulose, centrally longitudinally carinate, the carination not reaching base, the lateral margins strongly reflexed; tegmina not three times longer than broad, densely finely punctate, the apical area strongly reticulately veined.

Long., excl. tegm., 11–11½ mm.; exp. tegm. 32 mm.

Hab. Bolivia (*Steinbach*, Brit. Mus.).

To be placed near *T. cercopoides*, Walk. So far as I understand Breddin's descriptions, the *T. erigena* and *T. rodopepla* of that writer should also belong to this group.

Tomaspis chilensis, sp. n.

Vertex, pronotum, and scutellum piceous; broad anterior margin to vertex, broad lateral margins (which inwardly are vaguely defined and tend to produce discal suffusions) and a narrow anterior margin to pronotum ochraceous; abdomen (above and beneath) and face ochraceous; sternum and legs piceous, the femora more or less streaked with ochraceous; tegmina piceous, the basal area indefinitely ochraceous, more strongly outwardly accentuated by a transverse spot on costal area; wings pale fuliginous; vertex almost as long as breadth between eyes, centrally longitudinally carinate, and on each side of the central carination is a short curved carination from a little in front of ocelli to apex; pronotum feebly centrally carinate, obsoletely so on posterior half, the lateral margins distinctly reflexed; face compressed, centrally longitudinally strongly carinate, a little angulate posteriorly (intermediate between the *Monecphora* and *Sphenorhina* types), very strongly laterally transversely striate; posterior tibiae with two strong spines, the shorter almost at base, the longer at about one-third from apex; tegmina about two and a half times as long as broad.

Long., excl. tegm., 11 mm.; exp. tegm. 32 mm.

Hab. Chili.

The type of this species was given me many years ago by my late friend Stephen Barton, a coleopterist. He had received it from Edwin Reed, by whom it had been collected.

Tomaspis fraseri, sp. n.

Head, pronotum, scutellum, and sternum castaneous; legs and abdomen testaceous red, the latter paler above than beneath; tegmina pitchy black, suffused with sanguineous on basal area, followed by two spots in oblique series (one in and the other above clavus), a subcostal spot before apical area, and another more oblique spot parallel to it near inner margin sanguineous; wings pale fuliginous; vertex about as long as breadth between eyes, rather angularly rounded in front and centrally longitudinally carinate; pronotum wrinkled and thickly finely punctate, centrally longitudinally carinate; scutellum foveately depressed on disk, the apical area transversely wrinkled; face compressed, angulate posteriorly, strongly centrally longitudinally carinate (*Sphenorhina* type); posterior tibiae with two spines, the shorter near base, the longer near apex; tegmina about two and a half times as long as broad.

Long., excl. tegm., 10 mm.; exp. tegm. 23 mm.

Hab. Ecuador; Cuença (*Fraser*, Brit. Mus.).

Tomaspis proserpina, sp. n.

Vertex, pronotum, scutellum, face, sternum, and legs sanguineous; abdomen and spots to mesonotum black; base of abdomen above sanguineous; posterior femora (more or less) and apices of posterior tibiae and tarsi piceous; tegmina black, basal fourth and costal margin sanguineous, the basal red space usually but not invariably marked with a macular piceous stripe; vertex about as long as breadth between eyes, a little pointed anteriorly, foveately depressed at apex and on each side before the eyes; face moderately compressed, pointed posteriorly (*Sphenorhina* type); pronotum finely granulose, centrally ridged from anterior margin to about middle, on anterior area and on each side of the ridge distinctly foveately depressed, lateral margins oblique, sharply and distinctly reflexed; scutellum with the disk ovately foveate; posterior tibiae with a strong spine near apex and a short spine near base; tegmina about two and a half times as long as broad.

Long., excl. tegm., 7 mm.; exp. tegm. 20 mm.

Hab. Bolivia; Yungas de la Paz (Brit. Mus.).

Tomaspis hebes, sp. n.

Vertex, pronotum, scutellum, base of abdomen, face, clypeus, and broad lateral areas to the prosternum ochraceous; abdomen above, body beneath, and legs shining black; tegmina black, the basal fifth golden yellow; wings pale fuliginous; vertex about as long as breadth between eyes, a little angularly narrowed before eyes, longitudinally impressed on each side of ocelli; face compressed, posteriorly pointed, thence oblique to clypeus, centrally longitudinally ridged; pronotum foveately depressed on each side of anterior area, the lateral margins sharply reflexed; posterior tibiae with a prominent spine a little before apex; tegmina about two and a half times as long as broad.

Var.—Tegmina with a golden-yellow costal spot a little beyond middle.

Long., excl. tegm., $8\frac{1}{2}$ –9 mm.; exp. tegm. 23–24 mm.

Hab. Bolivia; Yungas de la Paz (Brit. Mus.).

Allied to *T. proserpina* by the somewhat angulate vertex, which but for intermediate forms would apparently denote another genus.

Tomaspis dimorpha, sp. n.

♂. Vertex, pronotum, and scutellum castaneous-brown; abdomen above black, its base sanguineous; body beneath black, legs piceous; sternum and coxæ more or less testaceous red; tegmina brownish ochraceous, the apical area yellowish, defined inwardly by a transverse black fascia which is continued on costal margin to apex, the pale apical area very coarsely reticulately veined, and in most of these cellules is a piceous-brown spot; wings pale ochraceous, slightly sanguineous at base.

Var.—♀. Vertex, pronotum, scutellum, and tegmina black, on the latter the transverse fascia defining the pale apical area is thus indistinguishable.

Face compressed, elongate, almost perpendicularly directed downward, where it terminates in a somewhat sharp point (*Sphenorhina* type), and strongly centrally longitudinally ridged; vertex about as long as breadth between eyes, with a central longitudinal carination, on each side of which is another and shorter carination not reaching base; pronotum rugulose and punctate, centrally longitudinally carinate, broadly foveately depressed on each side of anterior area, the anterior lateral margins distinctly reflexed; scutellum with the disk broadly foveately depressed; tegmina about two and one-third times as long as broad.

Long., excl. tegm., ♂ ♀ 8-9 mm.; exp. tegm. 22 mm.

Hab. Bolivia; Yungas de la Paz.

I possess a single specimen of each sex of this species, which vary as above. Whether this represents sexual dimorphism, as I am inclined to believe, or simple variation, can only be decided when a series of specimens are available for examination.

Tomaspis distinguenda.

Sphenorhina distinguenda, Walk. List Hom., Suppl. p. 182 (1858).

Tomaspis rubra, Fowl. (nec Linn.), Biol. Centr.-Am., Rhynch. Hom. ii. p. 183, tab. xi. figs. 15 & 16 (1897): excl. syn.

Walker's type was from Venezuela; all the specimens collected by Champion were from Panama.

Tomaspis nigricans.

Tomaspis nigricans, Amy. & Serv. Hist. Hémo. p. 560 (1843).

Sphenorhina marginata, Walk. (nec Fabr.), List Hom. iii. p. 686 (1851).

The *Cercopis marginata*, Fabr., has been shown by Stål to be a *Gypona* (Hem. Fabr. ii. p. 85, 1869).

Tomaspis festa.

Cercopis festa, Germ. Mag. Ent. iv. p. 40 (1821).

Sphenorhina festa, Stål, Rio Jan. Hem. ii. p. 14 (1858).

Sphenorhina parallela, Walk. List Hom. iii. p. 694 (1851).

Tomaspis lineata, Fowl. (part.), Biol. Centr.-Am., Rhynch. Hom. ii. p. 189 (1897).

Fowler has included the *S. parallela*, Walk., as a synonym of *S. lineata*, Walk. The two species are, however, quite distinct by markings of tegmina and shape of face, and Stål correctly pointed out the identity of the former species with *C. festa*, Germ.

Tomaspis stellata.

Sphenorhina stellata, Walk. List Hom. iii. p. 691 (1851).

Sphenorhina 12-punctata, Walk. Ins. Saund., Hom. p. 90 (1858).

Tomaspis semifascia.

Monephora semifascia, Walk. List Hom. iii. p. 679 (1851).

Monephora demissa, Walk. loc. cit. p. 684.

Tomaspis flexuosa.

Monephora flexuosa, Walk. List Hom. iii. p. 677 (1851).

Monephora viridescens, Walk. loc. cit. p. 679.

Monephora vacillans, Walk. Ins. Saund., Hom. p. 86 (1858).

Tomaspis costaricensis.

Sphenorhina costaricensis, Dist. Ent. Month. Mag. xvi. p. 61 (1879).

Tomaspis quatuordecim-notata, Fowl. Biol. Centr.-Am., Rhynch. Hom. ii. p. 177, t. xi. fig. 5 (1897).

Tomaspis incompleta.

Monecphora incompleta, Walk. List Hom. iii. p. 684 (1851).

Sphenorhina diluta, Walk. Ins. Saund., Hom. p. 92 (1858).

Although Walker describes the colour of *incompleta* as "pale brown, shining" and that of *diluta* as "blackish green," the colours of the two forms are practically identical, and "brown" must be substituted for "blackish green."

Tomaspis compressa.

Cercopis compressa, St. Farg. & Serv. Enc. Méth. x. p. 666. 13 (1825).

Var. *a* (typical).—Pronotum sanguineous; legs black, posterior femora and bases of posterior tibiæ sanguineous. Cayenne (Brit. Mus.). Original habitat of describers.

Var. *b*.—All the femora sanguineous or ochraceous, tibiæ and tarsi black; apical margin of tegmina black, but with the apical area sometimes suffused with black. Amazons (Brit. Mus.); Ega (Coll. Dist.).

Var. *c* (Stoll, Cic. fig. 112).—Pronotum and legs black. Surinam, *vide* Stoll. This figure is said to represent a form of the species (*St. Farg. & Serv.*).

NEOSPHENORHINA, gen. nov.

Vertex about as long as breadth between eyes, angularly narrowed anteriorly, centrally longitudinally carinate, and longitudinally ridged near the anterior margin of each eye; face very strongly compressed, almost straightly deflected downward to a point opposite base of clypeus, to which it is then truncately directed; rostrum slightly passing the intermediate coxæ; pronotum a little longer than broad, the anterior lateral margins oblique, not convexly rounded but a little concavely sinuate, longer than the posterior lateral margins, centrally finely longitudinally carinate, anterior margin truncate and not extending beyond eyes, posterior margin angularly concavely sinuate; scutellum a little longer than broad at base; abdomen above with the connexivum strongly broadly upwardly ridged; legs long and slender, posterior tibiæ with two spines, posterior tarsi long, first and third joints subequal in length; tegmina long and narrow, slightly more than three times as long as broad.

Type, *N. ocellata*, Walk.

The peculiar structure of the pronotum, with the pointed vertex and long narrow tegmina, are the salient characters of this genus.

Neosphenorhina ocellata.

Sphenorhina ocellata, Walk. List Hom. iii. p. 693 (1851).

Hab. Venezuela.

TOMASPISINA, gen. nov.

Vertex about as long as broad, rounded in front, transversely impressed at middle; ocelli somewhat near together at about one-third from base; pronotum about half as long as the breadth between the humeral angles, a little convexly gibbous at base and deflexed towards head, anterior lateral margins moderately ampliate and reflexed, very slightly rounded, almost straight, much shorter than posterior lateral margins, which are concavely sinuate, anterior margin straightly truncate, posterior margin profoundly sinuate before scutellum, centrally longitudinally carinate; scutellum longer than broad, the apex acuminate; face broad, deflected to an obtuse point and then truncately deflected to base of clypeus; rostrum reaching the intermediate coxæ; tegmina about two and a half times as long as broad, the whole surface, excepting central base, very robustly and prominently reticulately veined; wings ample; posterior tibiæ with a single long spine beyond middle.

Type, *T. frontalis*, Walk.

Tomaspisina frontalis.

Sphenorhina frontalis, Walk. Ins. Saund., Hom. p. 89 (1858).

Hab. Colombia.

NEOMONECPHORA, gen. nov.

Allied to *Makonaima*; vertex similar in structure, but the central longitudinal carination restricted to the basal half, and the lateral margins before eyes with their edges not ridged and upwardly raised, ocelli placed a little nearer base; face neither centrally ridged nor deflected to a more or less acute point, but evenly rounded to clypeus; scutellum not longer than broad and discally strongly foveately depressed; rostrum scarcely passing the anterior coxæ; abdomen above not centrally raised, but broad with a longitudinal incised

line on each lateral area, and slightly longitudinally ridged before the connexivum, which is broad and distinct; posterior femora less longly and strongly sulcate beneath, posterior tibiæ slightly not considerably longer than the femora as in *Makonaima*, and with a single spine beyond the middle; tegmina three times as long as broad, not prominently arched at base.

Type, *N. insignis*, Dist.

The large and broad vertex is the character which principally allies this genus to *Makonaima*.

Neomonecphora insignis, sp. n.

Vertex and pronotum brownish testaceous; scutellum, abdomen above, body beneath, and legs black; face and lateral margins of prosternum brownish testaceous; tegmina brownish ochraceous, apical half of costal area, apical margin narrowly continued to apex of clavus, and a rounded subcostal spot before middle black, posterior margin of clavus piceous brown; wings fuliginous; pronotum distinctly broadly foveately depressed on each side of anterior area, its anterior lateral margins somewhat broadly reflexed; scutellum somewhat faintly transversely striate, the disk very strongly foveately depressed; other structural characters as in generic diagnosis.

Long., excl. tegm., ♀ 15 mm.; exp. tegm. 40 mm.

Hab. Brazil (Fry Coll., Brit. Mus.).

MAKONAIMA, gen. nov.

Vertex as long as breadth between eyes, centrally longitudinally carinate, transversely impressed before the eyes, the lateral margins before eyes lobately convex, their edges ridged and raised upwardly, and somewhat abruptly separated from the apical margin, which is broadly transversely convex, and also distinctly separated from the lateral margins of the central area or lobe, the margins of which are ridged; ocelli placed on each side of the central carination at less than one-third from base; face somewhat globose, compressed, centrally longitudinally ridged, deflected in front to a more or less acute point, and then obliquely directed backward to the base of the clypeus, which does not quite reach the anterior coxæ; pronotum about as broad between the lateral angles as its length and that of vertex taken together, rounded and somewhat gibbous on basal area and then suddenly and obliquely deflected towards head, the anterior lateral shorter than the posterior lateral margins, the former

convex, the latter obliquely sinuate, and both ridged, the lateral angles obtusely subprominent, the anterior margin truncate, the posterior margin concavely sinuate before scutellum, which is considerably longer than broad, discally foveately depressed, strongly transversely striate, its apex long and attenuate; rostrum just or almost reaching the posterior coxæ; abdomen above centrally raised, the lateral areas deflected on each side, the connexivum broad and distinct; legs moderately long and robust, the posterior femora strongly longitudinally sulcate beneath, posterior tibiæ considerably longer than the femora and with a single long spine beyond the middle, posterior tarsi very long, third joint longest, as long or only a little shorter than first and second together; tegmina about or only a little more than twice as long as broad, costal margin arched at base and convexly deflected to apex, which is rounded, and densely, evenly, finely punctate; wings long and ample, about three-fourths the length of tegmina.

Type, *M. rivularis*, Dist.

Makonaima rivularis, sp. n.

Vertex dull reddish, the lateral margins before eyes bright reddish ochraceous; pronotum piceous, the lateral and posterior margins and a central longitudinal carination bright reddish ochraceous; scutellum dark purplish, its apical third bright reddish ochraceous; body beneath and legs purplish brown, the abdomen darkest; a central longitudinal fascia to face and posterior margin to metasternum bright reddish ochraceous; tegmina piceous, with small linear reddish-ochraceous spots, about seven arranged in longitudinal series beneath costal area,—two subapical, two above and beyond clavus, and a longer linear spot near middle of upper claval margin; wings dark fuliginous, their extreme bases carmine-red; pronotum finely granulose and punctate, centrally longitudinally carinate, the carination not extending to base; scutellum coarsely transversely striate, the disk broadly ovately depressed, the apex longly attenuate; scutellum reaching the posterior coxæ; tegmina strongly arched at base.

Long., excl. tegm., 17–18 mm.; exp. tegm. 48 mm.

Hab. Peru; Ecuador, Cuenca (Brit. Mus.).

Makonaima circumducta, sp. n.

Piceous; vertex with the lateral areas in front of eyes and a spot at apex, pronotum with the lateral and posterior

margins and the central longitudinal carination, apical third of scutellum, abdominal anal appendages, central longitudinal fascia and apex to face, tegmina with a small spot a little beyond base, and a fasciate looped line commencing about one-third from base below costal area, continued subapically and then backwardly above clavus to less than one-third from base, and extreme base of wings, reddish ochraceous or pale sanguineous; vertex with the central longitudinal carination very distinct; face moderately compressed, centrally longitudinally ridged, deflected in front to a more or less acute point and then obliquely directed backward to base of clypeus; rostrum reaching the posterior coxæ; pronotum finely rugulose and punctate, with a central longitudinal carination not reaching base; scutellum strongly transversely striate, the disk broadly ovately depressed; posterior tibiæ with a single long spine beyond middle; tegmina strongly arched at base.

Long., excl. tegm., 15 mm.; exp. tegm. 40 mm.

Hab. Bolivia, Yungas de la Paz.

KOROBONA, gen. nov.

Allied to *Makonaima*, from which it differs as follows:—The lateral margins before eyes are lobate and subangulate, but not convex, and are distinctly ridged and continued backwardly to base at inner margins of eyes; face subglobose, flat, not compressed, and evenly directed from base to clypeus; pronotum with the anterior lateral and posterior lateral margins about equal in length; posterior tibiæ with a moderately long spine beyond middle and a very short spine near base, posterior tarsi long and robust, the apical joint shorter than first and second joints together; tegmina short and narrow, about two and a half times as long as broad; wings small and narrow; abdomen above with a prominent basal transverse foveation on each side of apex of scutellum.

Type, *K. lineata*, Dist.

Korobona lineata, sp. n.

Black; pronotum with the lateral margins (broadly) and a central longitudinal carination, abdomen above with two central basal transverse foveations (one on each side of apex of scutellum), and a central longitudinal fascia to tegmina (neither reaching base nor apex) pale luteous; face and clypeus reddish testaceous; pronotum densely finely wrinkled and punctate, the central carination prominent, commencing at base but not reaching anterior margin, the anterior lateral

margins laminately reflexed; scutellum transversely striate and discally broadly ovately depressed, *its apex mutilated in typical specimen*; abdomen shining indigo-black, above prominently centrally ridged, and laterally obliquely deflected on each side, the connexivum broad and distinct, the margins of the latter longly pilose; legs pilose and robust; wings short, little more than half the length of tegmina, pale fuliginous, with the veins darker.

Long., excl. tegm., 16 mm.; exp. tegm. 35 mm.

Hab. Brazil? (Brit. Mus.).

The specimen on which this genus and species are founded is contained in the collection of the late Alexander Fry, and which was bequeathed to the British Museum. All the Rhynchota in this collection were from Brazil.

Korobona conspicua, sp. n.

Vertex black, the ocelli reddish; pronotum dull testaceous-red, two curved black spots near anterior margin (one on each side of the central carination) and two piceous curved fasciæ each extending from the anterior black spots parallel to the central carination, looped at base, continued along the posterior lateral margins and terminating before the humeral angles; scutellum, abdomen above, body beneath, and legs more or less black, the abdomen above shining bluish black, with the transverse basal foveations pale luteous; face, clypeus, and lateral margins of prosternum pale sanguineous, with a longitudinal fascia extending from base (where it is narrowest) beneath the costal area to near apex and attached to two fused inwardly directed spots on apical margin, and two discal longitudinal spots (one above apical half of clavus, the other above the next longitudinal vein), piceous; wings hyaline, fuliginous on basal and marginal areas, and with the veins black; pronotum finely wrinkled and obscurely punctate, with a distinct central longitudinal carination almost extending to base and apex, the anterior lateral margins slightly, the posterior lateral margins very strongly sinuate; scutellum strongly transversely striate, its disk broadly, ovately, moderately depressed; face as in generic diagnosis; rostrum passing the intermediate coxæ.

Long., excl. tegm., 21 mm.; exp. tegm. 51 mm.

Hab. Brazil.

I have no more precise locality for this fine species.

MAHANARVA, gen. nov.

Head robust, subtriangular, about as long as the breadth

between the eyes, the lateral and apical margins ridged and also strongly centrally longitudinally carinate, finely transversely impressed before eyes and obliquely impressed on each side of ocelli, which are placed close together at about one-fourth from base, divided by the central longitudinal ridge; face very prominent, slightly compressed, convexly deflected downwards to an obtuse point, below which it is obliquely continued to the clypeus, which reaches the anterior coxæ; rostrum about reaching the intermediate coxæ; pronotum more or less broadly obtusely ridged between the posterior angles and then deflected towards the head, centrally finely longitudinally carinate, the anterior margin straight, the anterior lateral margins oblique, the posterior lateral margins concavely obliquely sinuate, the posterior margin strongly concavely sinuate before the scutellum, which is about as long as broad at base, the apex longly attenuate; legs somewhat robust, posterior tibiæ with a prominent spine beyond middle and a smaller spine near base; tegmina a little more than twice as broad as long, their costal margins convex, their apices rounded, the veins on apical area reticulate and very prominent; posterior tarsi very long, the basal joint slightly shorter than second and third joints together.

Type, *M. indicata*, Dist.

The structure of the vertex and face is the principal characteristic of this genus; looking at the vertex from an oblique position, the base of the face is distinctly visible above.

Mahanarva indicata, sp. n.

Vertex, pronotum, scutellum, face, sternum, and legs very dark olivaceous; ocelli, base of rostrum, coxæ, extreme bases and apices of femora, apices of tibiæ, basal joint of posterior tarsi, and all the claws sanguineous; abdomen above very dark purplish red, beneath piceous, both surfaces more or less cretaceously tomentose; tegmina pale chocolate-brown, a narrow, obscure, paler, short longitudinal streak at base and two small sanguineous spots on apical area (one near costal the other near inner margin); wings pale fuliginous, the veins piceous, the extreme base sanguineous, outwardly suffused with black; vertex, pronotum, and scutellum thickly, finely, ochraceously pilose, vertex and pronotum thickly punctate, the latter centrally, longitudinally, finely, and somewhat obscurely carinate, with two foveate spots on each side of disk, between and a little in front of which are two contiguous, transverse, short impressions; scutellum

ovately depressed on disk and transversely striate; other structural characters as in generic diagnosis.

Long., excl. tegm., 10 mm.; exp. tegm. 23 mm.

Hab. Brazil (Brit. Mus.).

There is no more precise locality obtainable for this species, which was presented to the British Museum in 1868 by the late W. Wilson Saunders. It may therefore have been contained in the collections made by Bates and Wallace on the Amazons.

Mahanarva uniformis, sp. n.

Vertex, pronotum, scutellum, face, and body beneath piccous-black, with a slight olivaceous tint; legs piccous-brown; tegmina uniformly pale chocolate-brown, thickly, shortly, finely, palely pilose; vertex as in generic diagnosis, the ocelli ochraceous; face downwardly deflected but not terminating in such a distinctly obtuse point as in *M. indicata*; pronotum thickly, finely, transversely wrinkled, impressed as in *M. indicata*, centrally, finely, longitudinally carinate, the carination not reaching the anterior margin; scutellum ovately impressed on disk and transversely striate.

Long., incl. tegm., $9\frac{1}{2}$ mm.

Hab. Ecuador; Paramba and Cachabé (*Rosenberg*, Brit. Mus.).

Considerably smaller than *M. indicata*; face less pointed, pronotum more wrinkled and less punctate, differing also by the more uniform coloration and absence of sanguineous markings.

KANAIMA, gen. nov.

Vertex very large and broad, slightly longer than space between eyes, transversely impressed above and between the insertion of the antennæ, before this impression broadly convexly rounded, finely, centrally, longitudinally carinate, the ocelli somewhat close together, divided by the carination, and placed at less than one-third from base; face globose, oblong, its disk somewhat broadly flattened and evenly depressed to base of clypeus, transversely striate, and centrally, longitudinally, finely ridged; clypeus extending to the anterior coxæ; rostrum slightly passing the intermediate coxæ; pronotum about twice as broad as long, strongly foveately impressed on anterior disk, the anterior margin truncate, the anterior lateral margins convexly oblique, posterior margin truncate before scutellum, which is about as long as broad at base, its apical area attenuate; legs moderately robust, posterior tibiæ with two strong spines (one near base

and the larger a little beyond middle), posterior tarsi robust, first joint long (second and third joints mutilated in type); tegmina about two and a half times as long as broad, moderately narrowed towards apices, which are rounded, apical areas with the veins reticulate and prominent.

Type, *K. katzensteini*, Berg.

Allied to *Mahanarva*, vertex larger and of different shape and structure; posterior margin of pronotum truncate, &c.

Kanaima katzensteini.

Tomaspis katzensteini, Berg, Hem. Argent. p. 233 (1879).

Hab. Argentina.

XXIII.—*On the Characters and Affinities of "Desmalopex" and Pteralopex.* By KNUD ANDERSEN.

The Differential Characters of "Desmalopex."

The fruit-bat described by Temminck, fifty-six years ago, as *Pteropus leucopterus** has recently, by Miller, been made the type of a distinct genus, *Desmalopex* †, stated to differ from *Pteropus* by a series of cranial and dental characters. *Pteropus leucopterus* appears to be rare in collections, the only specimens recorded in literature being the type in the Leyden Museum (slightly immature) and two skins with skulls in the British Museum (adults, one of them described by Gray as "*Pteropus chinensis*" ‡). I have carefully tested all the differential characters of *Desmalopex* pointed out by Miller on these three skulls of *Desmalopex* and the whole British Museum series of skulls of *Pteropus*, representing

* Temminck, Esq. Zool. pp. 60-61 (1853); type locality unknown, "l'on présume une des îles Philippines."

† Miller, 'Families and Genera of Bats,' p. 60 (29 June, 1907).

‡ Gray, 'Catalogue of Monkeys, Lemurs, and Fruit-eating Bats,' p. 111 (1870). This specimen came to the Museum from Robert Fortune, who, from the spring of 1843 to late in 1845, travelled in the northern provinces of China as a collector to the Horticultural Society of London; hence it was, very naturally, believed by Gray to be from China. But the fact was apparently overlooked that Fortune also made an excursion to Luzon (January to early in March, 1845; see his 'Three Years' Wanderings in the Northern Provinces of China,' pp. 332-345, 1847). When to this it is added that no species of *Pteropus* is known to occur in China, and that the type of *Pt. chinensis* differs in no essential characters from the type of *Pt. leucopterus*, there can be no reasonable doubt that the former was in reality obtained by Fortune during his stay in Luzon.